



Keys Community Outfitted with Advanced Wastewater Treatment

Dr. Bill Kruczynski, EPA Water Quality Protection Program



Deputy Executive Director of the Florida Keys Aqueduct Kerry Shelby (second from the right) presided over the ribbon cutting ceremony in Marathon, Florida. The ceremony marked the culmination of work by many individuals, state, local, and federal entities.

On June 25, 2004, the Little Venice Sewage Treatment Plant officially came online. This state-of-the-art sewage treatment plant will treat sewage generated by approximately 970 equivalent dwelling units in Marathon. The plant provides “advanced wastewater treatment” that includes nutrient removal, and disposes of treated wastewater into a 90-foot injection well. The treatment plant provides residents with sewage treatment that meets all Florida Statute 99-395 requirements. All treatment systems in the Florida Keys are mandated to meet those requirements by 2010, and the residents of the Little Venice treatment area are six years ahead of that schedule!

The Florida Keys Aqueduct Authority was selected in 1998 to implement central wastewater systems in unincorporated areas of Monroe County. The Little Venice Wastewater System was initiated in 1998 based upon the County’s wastewater facilities plan for the Marathon area. After incorporation, the City of Marathon continued the construction project. Unique features of the plant include a

vacuum wastewater collection system and disinfection with ultraviolet light. The \$15.3 million project received a grant from the U.S. Environmental Protection Agency (USEPA) in April 1999 for \$4.326 million. The Florida Department of Environmental Protection worked closely with USEPA to help secure the \$4.3 million federal grant. The State of Florida also provided \$2.8 million in grants for this project. Other funding sources include the “Citizens of Little Venice” and a bonding company.

The ribbon-cutting ceremony at the Little Venice Treatment Plant was the culmination of a lot of work by many individuals. Kerry Shelby, deputy executive director of the Florida Keys Aqueduct Authority, presided over the ribbon-cutting ceremony. The festivities included speeches by federal, state, and local dignitaries and a tour of the facility. Shelley Miklas, representing Congresswoman Ileana Ros-Lehtinen, presented John Koenig, Sr., chairman of the Board of the Florida Keys Aqueduct Authority, with a United States flag for the facility.

Water quality of the oceanside residential canals in the Little Venice area has been monitored weekly for three years prior to operation of the wastewater treatment plant. Most homes in the area were built over cesspits, which provide little or no treatment of wastewater. Canal water quality showed higher levels of nutrients and bacteria compared to offshore control sites, particularly after rains, which wash wastewater into the adjacent canals. Canal water quality will be sampled again for a one-year period after all residences in the area are connected to the sewage treatment plant to assess any changes to nearshore water quality as the result of improved sewage treatment. The activation of this treatment facility is expected to reduce the nutrients and bacteria entering the nearshore waters of the Florida Keys National Marine Sanctuary in the vicinity of the Little Venice community.

If you have any questions about the Little Venice Treatment Plant, or water quality in the Florida Keys, please call Dr. Bill Kruczynski, U.S. Environmental Protection Agency, at (305) 743-0537.

Wastewater Websites

Water Quality Protection Program--<http://www.epa.gov/region4/programs/cbep/fl-nms.html>

Wastewater Treatment episode from Waterways--

www.fknms.nos.noaa.gov/water/episodes/214/welcome.html

Wastewater Treatment in the Florida Keys--US Coral Reef Task Force--www.coralreef.gov/waterq.cfm

Wastewater Treatment in Key West--<http://www.keywestwastewater.com/future.htm>